LHMP ANNEX
City of Healdsburg

Introduction

The City of Healdsburg is located in northern Sonoma County, California. The City has a population of 11,600 people, based on the 2004 census from the State Department of Finance. Last year, the City's budget was $50,101,805. The City employs 111 people and provides local police and fire services. The City is also unique in that it provides its own electric utility.

The Planning Process

Many elements of the Hazard Mitigation process were familiar to the City through past activities conducted in this area. In 1986, the City commissioned a study to examine geologic hazards within and adjacent to the City. The resulting *Fitch Mountain Geologic* Study and Resolution 147-86, adopted the findings of the report and implemented procedures for construction in areas of geologic hazards. In addition, in 1987 the City prepared its General Plan, which identified mitigation measures for fire, geologic & seismic and flood hazards in the document's Health and Safety Element (the plan is currently in the process of being updated). The same year, the City adopted an ordinance requiring fire sprinklers in all new construction to help mitigate the threat caused by wildfires in the urban interface along the north and east boundaries. The following year, the City passed Ordinance 826, adopting flood plain management regulations for those areas within flood zones established by the Federal Insurance Administration. Following the passage of the *Bates Bill* and the establishment of a *High Fire Hazard Severity Zone* by the California Department of Forestry (CDF) in 1995, the City began enforcing those provisions of the bill requiring vegetation clearance in the applicable areas. In addition, the City routinely enforces the requirements of the California Environmental Quality Act (CEQA) requirements (which, since 1988, have required mitigation for identified natural hazards). The City's effort has focused on utilizing these pre-existing programs to identifying gaps that may lead to disaster vulnerabilities in order to establish methodologies to mitigate these hazards.

Many of the activities conducted by the City were fed into the planning process for the multi-jurisdictional plan. The City participated in an ABAG workshop on June 8th, 2004 and April 14th, 2005. The City has provided written comments on the ABAG multi-jurisdictional plan and provided information on facilities that are viewed as "critical" to ABAG.

Once a draft Annex and Infrastructure Mitigation Strategies were prepared, meetings were held with the Planning, Public Works and Electrical Utilities Director to review the document. After all comments were incorporated, a final draft was disseminating to all City Department Heads and the City Manager on April 8th. The following week, all final comments were added and a public comment period was noticed and held between

May 18th and June 20th during which, no public comments were received. The mitigation strategies will become an implementation appendix to this Safety Element.

Hazard and Risk Assessment

The ABAG multi-jurisdictional Local Hazard Mitigation Plan, to which this is an Annex, lists nine hazards that impact the Bay Area, five related to earthquakes (faulting, shaking, earthquake induced landslides, liquefaction, and tsunamis) and four related to weather (flooding, landslides, wildfire and drought). These hazards all impact the community, except for Tsunamis.

The City has conducted a number of general hazard mapping activities in the first Health & Safety Element prepared by the City. These maps are fairly detailed but because of their age are not yet available in an electronic format. To view comparable hazard maps, the ABAG website can be accessed at: **http://quake.abag.ca.gov/mitigation/**.

The City has had several wildfires in the hills to the north and east side of the City, including one that destroyed two homes in 1988. This additional hazard information was included at the City Council meeting held on July 16th, 2005.

Information on disasters declared in Sonoma County is at:
http://quake.abag.ca.gov/mitigation/disaster-history.html.

The City examined the hazard exposure of City urban land based on the information on ABAG's website at **http://quake.abag.ca.gov/mitigation/pickdbh2.html**. Of the 2,356 acres in the City,

- Earthquake faulting – Two minor faults run along the east border of the City and into the Parkland Farms area in the north, creating limited potential for fault rupture. These were identified in the City's General Plan and Area A development documents which are more accurate than the ABAG data.
- Earthquake shaking – Approximately 1300 acres are in the highest two categories of shaking potential, in large part due to the proximity of the Rogers Creek Fault.
- Earthquake induced landslides - although the California Geologic Survey has not yet mapped this hazard in the City, zones of geologic instability have been mapped in detail and are available in the General Plan.
- Earthquake liquefaction – approximately 960 acres are in areas of moderate, high or very high liquefaction susceptibility.
- Tsunamis – Due to its inland location, there is no tsunami hazard in Healdsburg.
- Flooding - 255 acres are in the 100-year flood plain, while an additional 5 acres are in other flood-prone areas
- Landslides – Approximately 37 acres are subject to landslides
- Wildfire – 216 acres are in areas of high or very high wildfire threat because of the Urban interface nature of the City. It should be noted, these figures are

based on information from City maps, which illustrate the area with much greater accuracy than the ABAG data.
- Dam Inundation - 2100 acres are subject to dam inundation,
- Drought – all 2,356 acres are subject to drought.

The City also examined the hazard exposure of infrastructure based on the information on ABAG's website at **http://quake.abag.ca.gov/mitigation/pickdbh2.html**. Of the 42 miles of maintained roadways in the City,

- Earthquake Faulting – Because the faults enter the City only at the north end of the community, less than 1 mile of road is susceptible to fault rupture.
- Earthquake shaking - 8 miles of roadway are in the highest two categories of shaking potential.
- Earthquake induced landslides – Because limited development has occurred in areas of geologic instability, less than 6 miles of roads are in landslide susceptible areas.
- Earthquake liquefaction - 13 miles of roadway are in areas of moderate, high, or very high liquefaction susceptibility
- Tsunami – No tsunami threat exists in the City
- Flooding - 8 miles of roadway are in the 100-year flood plain, while an additional one mile is in other flood-prone areas
- Landslides – less than 6 miles of roads are in landslide susceptible areas.
- Wildfire - while no miles of roadway are subject to high, very high, or extreme wildfire threat, 11 miles of roads are in wildland-urban interface threat areas
- Dam Inundation - 30 miles of roadways are subject to dam inundation
- Drought – in not a hazard for roadways

Finally, the City examined the hazard exposure of critical health care facilities, schools, and city-owned buildings based on the information on ABAG's website at **http://quake.abag.ca.gov/mitigation/pickcrit.html**. Of the critical facilities in the City,

- Earthquake faulting - Because the fault enters the City only at the north end of the community, less than 1 mile of road and no critical buildings are subject to fault rupture.
- Earthquake Shaking - All 6 schools, and both critical health care facilities are in areas of moderate shaking potential.
- Earthquake induced landslides – Because limited development has occurred in areas of geologic instability, no critical facilities are in these areas based on City maps.
- Earthquake liquefaction - While no critical health care facilities are in areas of moderate, high, or very high liquefaction susceptibility, six schools are located in moderate susceptibility areas;
- Tsunamis – No tsunami threat exists in the City.
- Flooding - no critical health care facilities, schools, or city-owned facilities are in either the 100-year or 500 year flood plain areas;

- Landslides - No critical health care facilities, schools, or city-owned facilities are in areas of existing landslides;
- Wildfire - Both critical health care facilities and two schools are in wildland-urban interface threat areas.
- Dam Inundation -While no critical health care facilities are in the dam inundation zone, four schools and most city-owned facilities are located in these areas;
- Drought – drought will not affect City buildings directly, but the City does operate a water supply and distribution system

There is total of 14 repetitive flood loss properties in the City based on the information at **http://quake.abag.ca.gov/mitigation/pickflood.html.**

The City plans to work with ABAG during 2005 to improve the risk assessment information being compiled by ABAG by providing information on un-reinforced masonry buildings and soft-story apartments located in the City.

Drought, though a potential problem in the City, is not fully assessed. The City will work with ABAG and other local water agencies as necessary on this issue.

The City plans to work with ABAG to develop specific information about the kind and level of damage to buildings, infrastructure and critical facilities which might result from any of the hazards previously noted. The ABAG Annex states that ABAG will be doing this work in 2005 through 2006.

As these impacts are not fully developed, the City has reviewed the hazards identified and ranked the hazards based on past disasters and expected future impacts. The conclusion is that earthquakes (particularly shaking), flooding, wildfire, and landslides (including unstable earth, pose a significant risk for potential loss.

Mitigation Activities and Priorities

As a participant in the ABAG multi-jurisdictional planning process, City staff helped in the development and review of the comprehensive list of mitigation strategies in the overall multi-jurisdictional plan. The list was discussed at a meeting of the City Police and Fire Chiefs, City Manager, Assistant City Manager, Public Works Director, Planning Director and Chief Building Official, and Electric Utilities Director on March 22 and April 12, 2005. At the meeting, the strategies were reviewed. The tentative decision on priority was made based on a variety of criteria, not simply on an economic cost-benefit analysis. These criteria include being technically and administratively feasible, politically acceptable, socially appropriate, legal, economically sound, and not harmful to the environment or our heritage.

Over time, we are committed to developing better hazard and risk information to use in making those trade-offs. We are not trying to create a disaster-proof region, but a disaster-resistant one. In addition, many of the strategies are existing City programs. While no strategies are currently identified as having a High priority, the City may, in the course of reviewing mitigation strategies that have not yet been considered, identify

activities with high or very high priorities and may seek funding support for initiation of those activities.

These draft priorities were submitted to the City Manager for review and were agendized and adopted at the July 18th, 2005 City Council meeting. The public was provided with an opportunity to comment on the DRAFT priorities from May 18th to June 20th as described above. The final strategies (as shown in the attached Table) will become an *Implementation Appendix* to the City's *Safety Element*.

The Plan Maintenance and Update Process

The City's Fire Chief will ensure that monitoring of this Annex will occur. The plan will be monitored on an on-going basis. However, the major disasters affecting our community, legal changes, notices from ABAG as the lead agency in this process, and other triggers will be used. Finally, the Annex will be a discussion item at a meeting of the City department heads at least once a year in April. At that meeting, the department heads will focus on evaluating the Annex in light of technological and political changes during the past year or other significant events. This group will be responsible for determining if the plan should be updated.

The City of Healdsburg is committed to reviewing and updating this plan annex at least once every five years, as required by the Disaster Mitigation Act of 2000. The City Fire Chief will contact ABAG four years after this plan is approved to ensure that ABAG plans to undertake the plan update process. If so, the City again plans to participate in the multi-jurisdictional plan. If ABAG is unwilling or unable to act as the lead agency in the multi-jurisdictional effort, other agencies will be contacted, including the Sonoma County Department of Emergency Services. Counties should then work together to identify another regional forum for developing a multi-jurisdictional plan.

The public will continue to be involved whenever the plan is updated, and as appropriate during the monitoring and evaluation process. Prior to adoption of updates, the City will provide the opportunity for the public to comment on updates. A public notice will be posted prior to the meeting to announce the comment period and meeting time and location.